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Mass. Com. on Economy & Efficiency

Rept. on the work & Administration
of the Board of Commissioners on
Fisheries & Game, 1915.



Class _____

Book _____

REPORT

ON THE

WORK AND ADMINISTRATION

OF THE

BOARD OF COMMISSIONERS ON FISHERIES AND GAME

SUBMITTED TO

GOVERNOR AND COUNCIL AND GENERAL COURT

BY THE

House.
COMMISSION ON ECONOMY AND EFFICIENCY.

APRIL 26, 1915.



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BORD OF COMMISSIONERS ON
LAW AND GAME

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Journal of the American Statistical Association

10. The following table shows the number of hours worked by 1000 workers in a certain industry.

10. The following table shows the number of hours worked by each employee in a company.

10. The following table summarizes the results of the study.

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...and the first author's name, followed by the date of the manuscript.

1990 geht dies nicht weiter solange es keinen Anstieg gibt.

For more information about the study, contact Dr. Michael J. Klag at (301) 435-2900 or via e-mail at klag@mail.nih.gov.

10. The following table shows the number of hours worked by 1000 employees in a company.

10. The following table shows the number of hours worked by 1000 workers.

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2010-2011
2011-2012
2012-2013
2013-2014
2014-2015
2015-2016
2016-2017
2017-2018
2018-2019
2019-2020
2020-2021
2021-2022

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The Commonwealth of Massachusetts.

REPORT ON COMMISSIONERS ON FISHERIES AND GAME.

1. LETTER OF TRANSMITTAL, WITH SUMMARY OF RECOMMENDATIONS.

STATE HOUSE, BOSTON, April 26, 1915.

To His Excellency the Governor, the Honorable Council and the Honorable Senate and House of Representatives.

The Commission on Economy and Efficiency respectfully submits herewith a report on the work and administration of the Commissioners on Fisheries and Game, with constructive recommendations for important changes which should be made in the organization, policies and methods of that department.

We recognize the practical and economic importance of conserving the natural assets of fisheries and game, and are of the opinion that their conservation demands a reorganization of the Commissioners on Fisheries and Game to produce results satisfactory to the people of the Commonwealth. The statutes relating to the shore and shell fisheries of the Commonwealth should be revised so as to provide more nearly uniform conditions among the shore towns and to encourage the development of these important industries.

Briefly stated, we find that present conditions are unsatisfactory in that the Commissioners on Fisheries and Game are so organized under the present law as to preclude the fixing of responsibility; that the administration of the department in all branches of its work has been extremely lax; that no comprehensive policy has been adopted; that the cost of the game farms and fish hatcheries has been excessive; that the expense accounts of the commissioners have contained improper charges; that the output from the game farms has not been properly accounted for; and that the purchase and development of certain game farms and fish hatcheries have been ill-advised, involving unnecessary expenditures. In our opinion the enforce-

ment of the fish laws in Buzzards Bay by the District Police steamer "Lexington" is unnecessarily and unwarrantably expensive, equaling in cost for six months of each year over 21 per cent. of the total annual expense of enforcing the fish and game laws throughout all other sections of the Commonwealth.

The present conditions and practices obtaining in the Department of Fisheries and Game are described briefly in this report, and are shown in greater detail in documents on file in this office.

In order to correct the present unsatisfactory conditions in the Department of Fisheries and Game, the Commission on Economy and Efficiency respectfully submits the following recommendations: —

SUMMARY OF RECOMMENDATIONS.

Organization.

1. Statutory provision should be made for a single Commissioner on Fisheries and Game, to be appointed by the Governor, with the advice and consent of the Council, for a term of three years and at a salary to be fixed by statute. Such a reorganization is imperatively needed in order to fix responsibility and to correct the general laxity of administration now existing. (See page 24.)

2. A deputy commissioner to have immediate direction of the game farms and fish hatcheries should be appointed by the commissioner, and the salary fixed by him, subject to the approval of the Governor and Council. (See page 24.)

Finances and Accounts.

3. Appropriation acts should clearly indicate the amount which may be expended for definite purposes and activities, such as (a) the salaries and expenses of the commissioner and the office force; (b) the salaries and expenses of the deputies employed for the enforcement of law; (c) the expenses of each game farm, fish hatchery and game reservation; and (d) the acquisition of new properties, construction of buildings and other improvements. Money appropriated for one purpose should not be expended for any other purpose. (See pages 25 to 27.)

4. The accounting methods should be improved and accurate accounts should be kept to determine the cost of buildings and improvements, the cost of each principal class of work and of each game farm and fish hatchery, the revenue from sales of farm output, and the quantities of stock on hand, produced and distributed at each game farm and fish hatchery. (See pages 27 to 30.)

5. Cash received by superintendents of farms and hatcheries from sales should be turned into the State treasury instead of used for payment of bills. (See pages 30 and 31.)

6. The revenue from hunters' licenses should be collected by the Treasurer and Receiver-General's Department and not by the chief clerk in the office of the Commissioners on Fisheries and Game. (See page 31.)

7. Purely personal expenses should not be charged to the Commonwealth, and expense accounts should be audited with sufficient effectiveness to disallow improper charges. (See pages 31 to 35.)

Annual Report.

8. The *annual report* of the Commissioners on Fisheries and Game should be published annually, not triennially. (See pages 35 to 37.)

Purchase of Supplies.

9. Standard articles of equipment and supplies for the farms and hatcheries should be purchased in quantities through the central office. (See page 37.)

Enforcement of Law.

10. The chief deputy in charge of the enforcement of law should actually superintend the work of the State district deputies, instead of occupying a desk at the State House. (See pages 37 and 38.)

11. Nantucket and Martha's Vineyard should be consolidated into a single district for the enforcement of law and placed under the superintendent of the game farm at Martha's Vineyard. A deputy, at a lower salary than that paid each deputy now assigned to Nantucket and to Martha's Vineyard, should be appointed as an assistant to the superintendent. (See pages 38 to 39.)

12. The unwarranted expenditure of over \$10,000 annually for the District Police steamer "Lexington" to enforce law (primarily the fish laws) in Buzzards Bay for six months of each year should be discontinued, and the captain of this steamer, receiving \$2,000 a year and his maintenance while the steamer is in commission, should be assigned to duties commensurate with his compensation. (See pages 39 and 40.)

Shell Fisheries.

13. The Commissioner on Fisheries and Game to be appointed upon the reorganization of the department should report to the

General Court on methods or procedure for developing the shell-fish industries, with drafts of proposed legislation to correct present unsatisfactory conditions and to facilitate the production of shellfish. (See pages 40 to 43.)

Game Farms and Fish Hatcheries.

14. No further money should be expended for the development or extension of game farms and fish hatcheries until the commission is reorganized, a thorough survey of State conditions and needs made, and a definite plan of development adopted, with due consideration given to the utilization, without expenditure for land, of institutional and reservation properties at present owned by the Commonwealth and to its co-operation with the United States government and the State Board of Agriculture and State Forester. (See pages 43 to 45.)

15. Careful study should be made as to whether direct purchase of fish and game for restocking would not be more advantageous, both as to economy and to practical results obtained, than the present system of production. (See page 47.)

16. The proposed purchase of additional land at East Sandwich should be abandoned, the game farm discontinued and the game and State property now located on the game farm transferred to some other State reservation. (See pages 44 and 48.)

17. The game farm at Wilbraham should be discontinued, the game and equipment transferred to the Palmer farm and other stations and the farm at Wilbraham sold. (See pages 48 and 49.)

18. The game farm at Sharon should be immediately discontinued, and the State property now located there transferred to the game reservation at Norfolk. (See pages 49 to 50.)

Appended to this report are copies of a proposed act and resolve embodying this commission's recommendations for reorganization of the Commission on Fisheries and Game and for the sale of the Commonwealth's property at Wilbraham.

Respectfully submitted,

COMMISSION ON ECONOMY AND EFFICIENCY,

FRANCIS X. TYRRELL, *Chairman.*

THOMAS W. WHITE.

RUSSELL A. WOOD.

2. DESCRIPTION OF WORK, FINANCES AND ORGANIZATION.

The Commissioners on Fisheries and Game are charged with (a) the enforcement of the State laws relative to game and fisheries, excepting the enforcement of the seining and lobster laws in Buzzards Bay, which is the duty of the District Police; (b) enforcement of certain laws relative to forest fires; (c) scientific investigations relating to fisheries and game; the propagation and distribution of fish, birds and game, including the stocking of ponds and brooks; and the establishment of bird and game preserves.

APPROPRIATIONS AND EXPENDITURES.

The appropriations and expenditures for the commission for the year 1914 are summarized in House Document No. 1, as follows: —

	Appropriation.	Expenditures.
<i>Annual Expenses.</i>		
1. Compensation of commissioners,	\$6,130 00	\$6,040 00
2. Expenses,	6,500 00	5,738 89
3. Clerical services,	5,520 00	4,720 06
4. Enforcement of the laws,	47,000 00	46,377 29
5. Stocking great ponds,	500 00	499 74
<i>Special Expenses.</i>		
6. Establishment of fish hatcheries,	8,000 00	7,453 21
Propagation of game birds and animals,	23,200 00	26,632 98 ¹
Propagation of food fish,	34,965 00	31,456 00
7. Codification of fish and game laws,	—	215 22 ²
Ice house at Palmer hatchery,	500 00	498 80
Piping W�braham game farm,	1,000 00	990 30
Increasing supply of food and game fish,	5,000 00	4,096 98
	\$138,315 00	\$134,719 47

¹ Balance from extraordinary expenses.

² Balance from 1913.

ORGANIZATION.

The work of the department is under the control of three commissioners, appointed by the Governor, with the advice and consent of the Council, for terms of five years. The commissioners are co-ordinate in authority and select one of their number to serve as chairman. The chairman devotes his full time to the work of the department, while the other two members serve part time only, being actively engaged in private business. The salaries of the commissioners are fixed by the Governor and Council. The personnel of the commission is as follows: —

George W. Field, chairman, Sharon; \$3,000; term expired in December, 1914.

George H. Graham, Springfield; \$5 per day for each day except Sundays and holidays; term expires 1916.

William C. Adams, Boston; \$5 per day for each day except Sundays and holidays; term expires 1918.

The department has 77 officials and employees who are organized into an office force and 13 other groups or divisions each of which is in charge of an official directly responsible to the commissioners. The names of the several divisions and the number of officials and employees in each are shown in the following summary:—

Commissioners,	3
I. Clerks and stenographers,	6
II. Biologist and assistant,	2
III. Division for enforcement of law,	28
IV. Wilbraham game farm,	4
V. Sutton hatchery,	7
VI. Palmer hatchery,	9
VII. Sandwich hatchery,	7
VIII. Sandwich hatchery (bird farm),	3
IX. Adams hatchery,	1
X. Martha's Vineyard Reservation,	3
XI. Sharon Reservation,	1
XII. Marshfield Reservation,	1
XIII. Norfolk State Hospital Reservation,	1
XIV. Hadley hatchery (not in use),	1

77

A detailed statement showing the several classes of officials and employees and their rates of compensation is given as an appendix to this report.

The work and organization of the department are further described under the titles (a) "Central Office," (b) "Enforcement of Law," and (c) "Propagation and Distribution of Fish and Game."

CENTRAL OFFICE.

In addition to such administrative work as is performed by the commissioners, the office work consists of routine clerical and stenographic work, keeping records and accounts, and the receipt of revenue from hunters' licenses¹ issued by city and town clerks. The office force comprises the following:—

¹ For amount of receipts in 1912, 1913 and 1914, see Appendix B.

Clerk in charge,	\$1,500 00	yr.
Stenographer,	85 00	mo.
Stenographer,	75 00	mo.
Bookkeeper,	62 50	mo.
Stenographer (temporary),	50 00	mo.
Office boy,	25 00	mo.

The appropriations and expenditures for the commissioners' salaries and traveling expenses and for the office during 1914, were as follows:—

	Appropriations.	Expenditures.
1. Compensation of commissioners,	\$6,130 00	\$6,040 00
2. Expenses,	6,500 00	5,738 89
3. Clerical services,	5,520 00	4,720 06

Item 2, "expenses," was expended for the following objects:—

Books, periodicals, etc.,	\$65 22
Photographs, taxidermic work, etc.,	153 97
Postage and expressage,	559 31
Printing,	644 65
89,500 hunters' licenses (5 kinds),	613 10
Stationery, office supplies, etc.,	470 54
Typewriters,	193 00
Telephone and telegrams,	466 46
Expenses, delegates to conventions,	462 21
Traveling expenses:—	
George W. Field,	\$788 44
William C. Adams,	394 76
George H. Graham,	520 30
Automobile and hotel bills,	283 59
Employees' expense bills and mileage,	123 34
	2,110 43
	\$5,738 89

The commissioners' traveling expenses were paid in part from other appropriations, as enforcement of law, etc.

ENFORCEMENT OF LAW.

The enforcement of the fish and game laws costs approximately one-third of the total amount expended for the Commissioners on Fisheries and Game. The statutes contain a large number of provisions relative to the protection and taking of

fish and game, including many special statutes for particular localities. No codification of the fish and game laws has been made subsequent to the enactment of the Revised Laws in 1902. Generally speaking, the laws prescribe the places, time and the kind of fish (including shellfish) and game which may be legally taken. The laws also contain provisions prohibiting the contamination of certain fishing waters, and other provisions relative to maintenance or use of ponds, brooks, rivers, etc.

The different classes of violations of the fish and game laws during 1914, and the number of arrests for each class, are shown in the following statement:—

Violations of fish laws:—	Number of Cases.
Using over ten hooks,	1
Fishing in stocked ponds,	7
Illegal possession of pickerel in closed season,	2
Illegal possession of short pickerel,	3
Illegal possession of short bass,	19
Illegal possession or taking of smelts,	17
Illegal taking of scallops,	22
Illegal taking of fresh-water fish,	53
Illegal taking of fish in Lynn Harbor,	4
Molesting or interfering with lobster traps,	2
Possession of lobster car not marked with name or address,	3
Possession of seed lobsters,	2
Possession of short lobsters,	29
Possession of short trout,	11
Securing license through misrepresentation,	2
Setting nets illegally,	6
Shipping lobster meat without a permit,	1
Violation of shellfish laws,	72
Taking salmon in closed season,	1
 Total,	 257

Violations of game laws:—

Failure to make returns of money,	2
Hunting on the Lord's day,	49
Hunting without certificate,	107
Hunting, wounding or killing deer,	11
Illegal killing of deer in open season,	1
Hunting with ferret,	14
Hunting on posted land,	30
Hunting on State reservation,	2
Illegal possession or hunting of game,	35
Killing or possessing song or insectivorous birds,	16

	Number of Cases.
Violations of game laws — <i>Con.</i>	
Illegally killing rabbits,	3
Possessing or killing heron or bittern,	1
Setting snares,	1
Trapping illegally,	5
Trespass on State reservation,	2
Killing bull moose,	1
Hunting with rifle during open season on deer,	1
	—
Total,	281
Assault on officer in performance of duty, ¹	6
Carrying concealed weapon,	3
	— 9
Grand total,	547

Of the arrests made in 1914, 519 were made by paid State deputies, 8 by unpaid State deputies, 7 by town game wardens and 4 by the chief of police in the town of Oxford.

The amount of moneys collected in 1914 by the courts on account of the violations reported above amounted to \$5,412.50.

Organization.

The force employed on the enforcement of law comprises a chief deputy, twenty-seven State district deputies, one special deputy and five superintendents of State hatcheries who are commissioned to serve as deputies in making arrests and in otherwise enforcing the laws. In addition to the State force just described the cities and towns appoint local game wardens for the enforcement of law in their several localities. The State District Police also are authorized to enforce all fish and game laws, and they give particular attention to the enforcement of such laws in Buzzards Bay. The work is so divided as to leave the full responsibility for the enforcement of the fish and game laws in Buzzards Bay upon the District Police, as the Fish and Game Commissioners hold the opinion that their deputies should not investigate conditions in that locality, in view of the provisions made for such duty by another department.

The Federal government has designated five of the State's district deputies as United States inspectors of migratory birds, and pays each of them at the rate of \$12 per annum.

¹ Not a violation of a game law, but complained of by officers who made arrests for violations of game laws.

The names and residences of the State deputies and the number of arrests made by each in 1914 are shown in the following statement:—

Salaried Deputies.

DISTRICT NUMBER.	Residence.	Name of Deputy.	Salaries (Year).	Number of Arrests.
1,	Nantucket, . . .	Jones, Wm. H., . . .	\$1,200	—
2,	Edgartown, . . .	Keniston, Allan, . . .	1,200	2
3,	Harwich, . . .	Mecarta, Everett B., ¹	1,200	42
4,	New Bedford, . . .	Lowe, Samuel J., . . .	1,200	14
5,	Taunton, . . .	David, Allen A., ¹	1,200	25
6,	Middleborough, .	Pratt, Nathan W., . .	1,200	18
7,	Brockton, . . .	Tribou, Chas. E., . .	1,200	73
8,	— — —	— — —	—	—
9,	East Foxborough, .	Leonard, Wm. H., . .	1,200	17
10,	Framingham, . . .	Bemis, James E., . .	1,200	23
11,	East Boston, . . .	Goodwin, Fred W., ¹	1,200	50
12,	Gloucester, . . .	Grant, Carl E., ¹	1,200	21
13,	Andover, . . .	Larkin, Walter A., . .	1,200	17
14,	West Lynn, . . .	Burney, Thomas L., . .	1,200	26
15,	— — —	— — —	—	—
16,	North Grafton, .	Macker, Elmer A., . .	960	18
17,	Worcester, . . .	Snell, Jay, . . .	960	30
18,	Fitchburg, . . .	Converse, Irving O., .	1,200	4
19,	Gardner, . . .	Stratton, A. L., . .	1,200	14
20,	Ware, . . .	Shea, Dennis F., . .	1,200	9
21,	Palmer, . . .	Luman, John F., . .	1,200	3
22,	Springfield, . . .	Hatch, James P., ¹	1,200	21
23,	Westfield, . . .	Monahan, Peter P., .	1,080	19
24,	Easthampton, . .	McCarthy, Patrick,	960	14
25,	Greenfield, . . .	Ruberg, Lyman E., .	1,200	6
26,	North Adams, . .	Nichols, Arthur M., .	1,200	15
27,	Pittsfield, . . .	Zeigler, Fred R., . .	1,200	17
28,	Lee, . . .	Sargood, Wm. W., . .	1,200	8
At large,	Andover, . . .	Piper, George W., . .	80 ²	1

¹ Also designated to serve as United States inspector of migratory birds.

² Per month.

Special Deputies.

RESIDENCE.	Name of Deputy.	Number of Arrests.
Interlaken,	Backus, Edw. E., Jr., ¹	-
Fall River,	Seaman, Wm. E., ¹	8
Byfield,	Steele, Orrin D., ¹	2
Fitchburg,	Harvey, Myron E., ²	2

¹ Appointed October 10.² Appointed April 6.*Hatchery Superintendents.*

RESIDENCE.	Name of Deputy.	Salaries.	Number of Arrests.
Vineyard Haven,	Day, William,	\$1,200 yr. ¹	-
Sutton,	Merrill, Arthur,	1,200 yr. ¹	-
East Sandwich,	Hitchings, F. E.,	112 mo.	-
Palmer,	Monroe, Otis,	1,200 yr. ¹	-
North Wilbraham,	Mosher, Joseph H.,	1,200 yr. ¹	-

¹ With use of house.

The management of the district deputies is vested at present in Chief Deputy Orrin C. Bourne, who receives a salary of \$1,500 per annum. The chief deputy has his headquarters at the commission's office in the State House, where he spends the greater portion of his time, visiting the several stations and the district deputies only in connection with some special work or assignment which he is performing individually. No inspections are made for the purpose of directing the district deputies in their work, or investigating conditions in their districts, unless a complaint is made or some special reason arises for investigation. A weekly "narrative report" is submitted by each deputy in which a description of each day's work is given, including the time at which the deputy left home and returned, the places visited by him and the names of persons with whom he conversed. The three commissioners occasionally visit the district deputies, but no systematic plan for overseeing their work is followed. The commissioners place the active management of the force to a great extent in Mr. Bourne's hands, and he issues orders, makes special assignments, etc.

The city and town game wardens are appointed by the Commissioners on Fisheries and Game upon written application made

by the city government of a city or the selectmen of a town. The local game wardens have powers and duties identical with those of the State deputies, and "act under the authority and instruction of the commissioners." The annual compensation of each local warden, not exceeding \$50, is paid by the city or town by which he is appointed. The Commissioners on Fisheries and Game require each local warden to submit to them a weekly narrative report similar to that made by the State district deputies.

Appropriation.

The amount appropriated for the enforcement of law in the year 1914 was \$47,000, of which \$46,377.29 was expended for the following objects:—

Deputies:—

Services, as per pay rolls,	\$31,320 11
Traveling expenses,	11,490 29
	—————
	\$42,810 40

Biologists:—

Services, as per pay rolls,	\$1,644 17
Travel,	491 58
	—————
	2,135 75

Reservations for birds and special work:—

Pay rolls,	\$150 00
Travel,	189 25
	—————
	339 25

General expenses:—

Advertising,	\$862 38
Feed (corn, grain, etc.),	66 22
Hardware, cement, etc.,	208 97
Legal and expert services,	88 25
Motor,	81 56
Photographs, maps, etc.,	89 00
Printing,	125 77
4,000 posters (3,000 cloth, 1,000 paper),	151 28
Stationery, postage and sundries,	64 50
Travel, mileage and expressage,	153 96
	—————
	1,091 89
	—————
	\$46,377 29

The rates of compensation of the several deputies have been shown on a preceding page. In certain instances the salaries have been paid in part from the appropriation for the enforcement of law and in part from other appropriations.

The appropriation for the enforcement of law was used in part

for other purposes until the Commission on Economy and Efficiency made certain investigations relative to the appropriations for Fisheries and Game. At a hearing with the Commission on Economy and Efficiency on Aug. 25, 1914, Dr. Field, chairman of the Commissioners on Fisheries and Game, stated as follows:—

Up to last year "enforcement of law" was a term which covered a great many different types of expenditure, — covered not only the people violating the law, but also the carrying out and caring for the work of the hatcheries, maintenance, etc.

Q. You wouldn't consider that a proper caption, would you? For instance, you spent \$72,363 in 1913 under the caption of enforcement of law, and over 55 per cent. was spent for maintenance. A. Yes. The attention of our department was not called to that matter until the Economy and Efficiency Commission took the matter up, and since then the Auditor's department has made separate divisions, and we have tried to conform to that.

Steamer "Lexington."

For about six months each year, the District Police operate the steamer "Lexington" for the enforcement of law in Buzzards Bay, especially the seining and lobster laws. The force employed on this steamer is made up as follows:—

Detective and captain of steamer,	. . . . .	1, at \$2,000 yr. ¹
Engineer,	. . . . .	1, at 1,200 yr. ¹
Assistant engineer,	. . . . .	1, at 840 yr. ¹
Steward,	. . . . .	1, at 840 yr. ¹
Deck hands (temporary),	. . . . .	4, at 35 mo. ¹
Deck hands (temporary),	. . . . .	2, at 33 mo. ¹
Deck hands (temporary),	. . . . .	2, at 12 mo. ¹

During the six months when the steamer is not in commission the detective in charge is assigned to other work; the engineer, his assistant and the steward work on board the steamer, and the deck hands are not employed. The salary of the detective in charge is paid from the appropriation for compensation of detectives in the District Police, but all other expenses are paid from an appropriation made for the "Lexington," which in 1914 was \$9,500, and of which \$9,475.27 was expended. Two violations of the lobster laws were detected by officers of the "Lexington" in 1913 and one violation in 1914. No other arrests for violations of fish and game laws were made by officers on the "Lexington" during 1913 or 1914.

¹ Receive maintenance while steamer is in commission.

PROPAGATION AND DISTRIBUTION OF FISH AND GAME.

The law provides that the authority of the Commissioners on Fisheries and Game shall extend to the propagation, protection and preservation of birds, animals and fish. The work of the commission with respect to the shore fisheries and shell fisheries is largely one of enforcement of law for the protection of natural sources of supply. The commissioners have, however, employed a biologist to conduct investigations of the mollusk fisheries of the Commonwealth, and have issued reports on the results of his investigations.

In the case of inland fisheries and game, the commissioners are engaged in the propagation and distribution of stock. For this purpose the following game farms and fish hatcheries are now maintained by the Commonwealth: —

1. Fish hatchery and game farm at Sutton, established in 1892.
2. Fish hatchery at Adams, established in 1898.
3. Game farm at Martha's Vineyard, established in 1908.
4. Fish hatchery and game farm at Sandwich, purchased from Sandwich Trout Company in 1912.
5. Fish hatchery and game farm at Palmer, established in 1912.
6. Game farm at Wilbraham, leased in 1912, purchased in 1913.
7. Game reservation on grounds of the Norfolk State Hospital, established in 1913.

At each of the above stations the Commonwealth owns land and buildings, and at Sandwich, Martha's Vineyard, Palmer and Wilbraham privately owned land is rented for use in connection with that owned by the Commonwealth. The State operated for several years a hatchery at Hadley, but this station was discontinued because of unsatisfactory water supply. The property at Hadley is now for sale, as authorized by chapter 49 of the Resolves of 1912. In an appendix to this report, detailed information relative to the acquisition of land and buildings at each game farm and fish hatchery is given.

The Commissioners on Fisheries and Game are authorized by chapter 410 of the Acts of 1911 to establish State bird and game preserves, and for this purpose they may "acquire in fee by purchase, gift or devise, or may lease, or, with the consent of the owners, may control any land, water or shore or the right to use the same, including the right of the public in such land or on such water or shore, as a bird and game preserve." Under this authority twenty-one game preserves have been established

throughout the Commonwealth. On two of these preserves paid employees of the Commonwealth are stationed, namely, at the Sharon station and at the Marshfield reservation, which were brought under State control in 1913.

The appropriations specifically made for the propagation and distribution of fish and game include the following for the years 1914 and 1915:—

	1914.	1915.
Stocking great ponds,	\$500	\$500
Establishment of fish hatcheries,	8,000	8,000
Propagation of game birds and animals,	23,200	
Propagation of food fish,	34,965	
Ice house at Palmer hatchery,	500	
Piping Wilbraham game farm,	1,000	
Increasing supply of food and game fish,	5,000	
	\$73,165	\$74,580

The salaries and expenses of the biologist and his assistants, which amounted to \$2,135.75 in 1914, are paid from the appropriation for the enforcement of laws. In 1914 an expenditure of \$339.25 for reservations for birds was also made from the appropriation for enforcement of law.

The amount of money spent in 1914 for the propagation of food fish and game birds, including a proportionate part of the salaries and expenses of the commissioners and office force, was approximately \$82,770.

The following tables summarize the production of fish and game, as reported to the Commissioners on Fisheries and Game by the superintendents of the stations:—

Fish hatched and distributed by Hatcheries under Control of Commissioners on Fisheries and Game, 1914.

STATION.	Pike.	Perch.	Salmon.	Bass.	Trout.
Adams Hatchery,	—	—	—	—	590,000
Palmer Hatchery,	16,750,000	8,150,000	34,000	64,000	26,000
Sandwich Hatchery,	—	—	—	—	1,112,750
Sutton Hatchery,	—	—	11,000	—	1,184,400
Totals,	16,750,000 ¹	8,150,000 ¹	45,000 ¹	64,000	2,913,150

Number of fish from eggs produced at stations, 2,977,150

Number of fish from eggs received from United States government, 24,945,000

Total of all fish distributed, 27,922,150²

¹ The eggs for these fish are secured from the Federal government hatcheries without cost.

² Fish fry, except about 729,000 fingerlings and 14,150 adult fish.

Production of Game Birds at Stations under the Control of the Commissioners on Fisheries and Game, 1914.

STATION.	Wild Turkeys.	Ducks.	Quail.	Pheasants.
Norfolk,	-	8	-	202
East Sandwich, ¹	-	-	-	-
Sharon,	-	88	6	234
Sutton,	-	654	-	569
Wilbraham,	22	576	—45	925
Totals,	22	1,326	—39	1,930

The Martha's Vineyard Reservation is maintained for heath hens, but the number cannot be accurately reported as the birds are wild.

No figures on production at Marshfield are available.

Information relative to the property, number of employees and the production at each game farm and fish hatchery owned by the Commonwealth is given in the following statements: —

Sutton Hatchery. — The State property at Sutton consists of 23 acres of hilly and rather barren land, a wooden house for the superintendent, a barn, a wooden building for a hatchery, a small wooden camp for two of the employees, a small ice house, together with coops, cages, etc., for the birds.

At the present time there are five permanent men employed at the hatchery: a superintendent at \$1,200 a year and use of house and barn; 2 assistants at \$50 a month; 1 at \$55 a month; and one at \$30 a month and board. Temporary laborers are hired from time to time and paid by the day.

No accurate records are kept of the number of birds and fish sent out from the hatchery, but the superintendent estimated that there were liberated or shipped during the year 1914, 654 ducks, 569 pheasants, 11,000 salmon and 1,184,400 trout. These figures differ from those given in the Fish and Game Commission's report on output of stations.

The total cost of maintenance for the year 1914 was \$9,799.85 according to the figures of the commission. The superintendent stated that he is in the habit of selling eggs, chickens, etc., and using the money to pay for grain and feed. This is a common practice at the hatcheries.

Adams Hatchery. — The State property at the Adams hatchery consists of 2 acres of land and a brick house for use as a hatchery

¹ No records.

measuring 35 by 40 feet. The superintendent, who receives \$240 a year, is the only paid employee.

There were hatched and distributed in 1914, 590,000 trout fry, and the total cost of running the hatchery was \$350.11.

Martha's Vineyard Reservation. — The reservation at Martha's Vineyard consists of 600 acres of land, with a house and barn owned by the State and 1,000 acres of leased land.

At the present time the State employs a superintendent at \$100 per month and use of house, and two temporary laborers, one at \$45 per month and one at \$35 per month. The total expenditures for the farm during 1914 were \$5,061.93.

Heath hens are the only game raised at this reservation. It is impossible to ascertain the number, since the heath hens are wild, but the superintendent estimates that there are at present nearly 1,000. None have ever been shipped from the farm.

Sandwich Hatchery. — The State property includes 21 acres of land at Sandwich and $4\frac{1}{2}$ acres at East Sandwich, a hatchery house on each property and fish pools. In addition, the State is renting at East Sandwich the Nye farm at \$225 a year and the Hitchings farm at \$300 a year. The property at Sandwich is used for a fish hatchery and that at East Sandwich for both a fish hatchery and game farm. The superintendent of the hatchery, Mr. Hitchings, lives in the Hitchings house at East Sandwich, which is rented by the State and is located five miles from the hatchery at Sandwich. At the present time no employee is located at the Sandwich hatchery at night. Seven men are employed at the hatchery as follows: —

One superintendent at \$1,200 per year, with house rent, milk and farm produce.

One bird culturist at \$1,200 per year, with house rent.

One man at \$65 per month.

Two men at \$50 per month.

One man at \$50 per month, with house rent and farm produce.

One helper at \$2 per day.

The bird culturist and the \$2 a day helper are employed on the game farm at East Sandwich, and the other men are employed at the fish hatcheries.

According to figures submitted by the Fish and Game Commissioners the expenditures for the fish hatchery alone in 1914, including expenditures for construction work, were \$12,917.32.

Figures submitted by the superintendent indicate that 1,112,-

750 trout were produced at the hatchery during 1914. There were also produced and shipped to other hatcheries 1,500,000 trout eggs. The superintendent reports that no record was kept of the birds raised on the farm during 1914.

Palmer Hatchery. — The State property at the Palmer hatchery consists of 233 acres of land, 3 houses, 1 hatchery, 1 ice house, together with dams, pools, etc. The estimated value of the entire plant, based upon figures submitted by the Commissioners on Fisheries and Game, is \$27,625. No accurate figures as to the cost of the buildings can be compiled, as no record was kept of the time that the superintendent and other employees spent on construction work.

At the present time there are five regular employees at the hatchery: the superintendent, who receives \$1,200 a year, house rent and farm produce; an assistant superintendent, who receives \$65 per month, house rent and farm produce; a fish culturist, who receives \$60 per month, house rent and farm produce; a driver, who receives \$50 per month, house rent and farm produce; and the superintendent's son, who is paid on an hourly basis, and who received \$486 for services between Dec. 1, 1913, and Feb. 28, 1915, although he attended school regularly.

According to the figures submitted by the superintendent there were distributed from the hatchery during 1914, 16,750,000 wall-eyed pike fry, 8,150,000 yellow perch fry, 12,000 black bass fry, 52,000 black bass fingerlings, 26,000 brook trout fingerlings and 34,000 salmon. With the exception of the bass and trout the fish were hatched from eggs furnished by the United States government.

The total expenditures, including those on construction account, for the hatchery during 1914 were \$15,845.69, according to figures submitted by the commissioners.

Wilbraham Game Farm. — The State property at Wilbraham consists of 132 acres of land, 2 houses, 2 barns and sheds, and coops, etc., for the game.

At the present time there are four employees: a superintendent at \$100 per month, with house rent and farm produce; the superintendent's son at \$55 per month, with house rent and farm produce; one laborer at \$2.50 per day, and one at \$2 per day.

During 1914, 300 mallard ducks were distributed from the farm. The superintendent estimated that he had raised during the year 925 pheasants, 576 ducks and 22 turkeys.

The expenditures for the game farm, including purchase of land and construction, for the year 1914 were \$14,884.61.

Norfolk State Hospital Reservation. — The game reservation at Norfolk is located on the grounds of the Norfolk State Hospital. At the present time the Fish and Game Commission employ only one man at the reservation, the superintendent, a former inmate of the State hospital, who receives \$50 per month from the commission and his house and supplies from the hospital. All work, other than that done by the superintendent, is performed by the inmates of the State hospital.

According to figures submitted by the superintendent, 202 pheasants and 8 ducks were raised during 1914.

The cost of running this reservation cannot be accurately figured, as part of the expense is borne by the Fish and Game Commission and part by the Norfolk State Hospital, which furnishes all extra help and supplies but keeps no record thereof. The amount expended by the Fish and Game Commission during 1914 was \$1,678.02, according to figures submitted by that commission.

Marshfield Reservation. — The reservation at Marshfield consists of 5,000 acres of privately owned land, the control of which was taken over by the State, as authorized by chapter 410, Acts of 1911, under an agreement with the owners for a period of five years. According to a statement of the superintendent of the reservation no difficulty will be experienced in obtaining the consent of the owners to extend the time indefinitely at the expiration of the present term. The State's property consists of hen houses and coops, which are constructed so that they can be readily moved from place to place. A superintendent, at a salary of \$600 per year, is the only regular employee. Ducks, geese and pheasants were raised during 1914, but no figures as to quantity are available. Quail and other birds were fed and protected at the reservation.

Sharon Station. — The station at Sharon is located upon property owned by the sister of the chairman of the Commissioners on Fisheries and Game. The equipment, such as coops, wire, fencing, etc., is the property of the State. No rent is paid for the use of the land.

At the present there is only one employee, the superintendent, who receives \$70 a month. Temporary help is employed from time to time, on a per diem basis.

According to the statement of the superintendent there were raised at the farm during 1914, 88 ducks, 6 quail and 234 pheasants.

3. CRITICISMS AND RECOMMENDATIONS.

REORGANIZATION OF THE COMMISSION.

The present plan of a commission of three members having co-ordinate authority, and selecting one of their number to serve as chairman, is unsatisfactory, as has been pointed out in a report made by the Commission on Economy and Efficiency to the General Court under date of Jan. 29, 1913. Some of the more important disadvantages in the present plan are the following:—

1. Division of authority with resulting division of responsibility, the chairman having no statutory standing as chairman.
2. The chairman is selected by a vote of his colleagues, and, accordingly, must feel he is under a greater degree of responsibility to them than to the Governor.
3. With one full-time and two part-time commissioners it is impossible to make any effective division of executive or administrative work among the three men.
4. Prompt and effective executive action by the three members is impossible, since two of them serve part time only. The part-time members are allowed \$5 per diem as compensation for each day of actual service, but in fact claim and receive compensation for each day in the year, except Sundays and holidays.
5. The administration of the department's work is extremely lax, and this faulty condition can best be corrected by a reorganization so as to establish a clear-cut line of authority from the head of the department down through each subordinate. With subordinates subject in equal degree to the authority of three commissioners, two of whom are only part-time officials, it is impossible to secure efficient administration.

To correct the unsatisfactory conditions just described it is recommended that the law be amended so as to provide for a single Commissioner on Fisheries and Game, to be appointed by the Governor, with the advice and consent of the Council, in place of the present board of three men. The salary of the commissioner should be fixed by law.

As shown in the section of this report describing the present conditions of game farms and fish hatcheries (pages 45 to 47), these stations have been conducted with wholly inadequate direction on the part of the commissioners. In order to correct this unsatisfactory condition it is recommended that a deputy commissioner be appointed for the specific duty of directing the

work of the game farms and fish hatcheries. The law providing for the appointment of this deputy should stipulate that an appointee must have had training and experience in the work of propagation and conservation of game birds and fish. The deputy should be appointed by the commissioner, and the deputy's salary should be fixed by the commissioner; subject to the approval of the Governor and Council.

With the changes in organization here recommended, namely, the substitution of a single commissioner for the present board, and the appointment of a deputy to have immediate direction over the game farms and fish hatcheries, together with the retention of a deputy to have immediate direction over the enforcement of laws, it is believed that a satisfactory plan of organization for conducting the work of the department will be provided. The question of continuing the department as a distinct branch of the State government, or of making it a bureau or division in a newly formed Department of Agriculture, should be postponed for consideration at a later time. The reorganization here recommended should be made whether the department is to remain distinct or is to be merged into a Department of Agriculture. The organization changes suggested are essential for the proper internal management of the work wherever placed in the State organization.

FINANCES AND ACCOUNTS.

Appropriations. — The arrangement of appropriation acts is of great importance in securing efficient administration of a department. If the appropriations are so granted as to show clearly the amount available for each principal class of work, and for each main division of the department, it is much easier to determine whether the departmental officials have complied with the intent of the appropriation act and have efficiently administered their department. In the case of the Commissioners on Fisheries and Game there are two main functions or classes of work, namely, the enforcement of laws relative to game and fish, and the propagation and distribution of fish and game birds. It is of primary importance to know what each of these two functions costs. It is also important to know the overhead or general expense of the department, and the expense of maintaining each station established for the propagation and distribution of fish and game.

The appropriations as granted in former years, and as drafted

for 1915, show only some of the information necessary for a proper consideration of the department. A greater fault, however, lies in the methods which have been followed by the commissioners in utilizing the appropriations; for example, the appropriation for the enforcement of law has been used for the totally different work of developing fish hatcheries and game farms. In order to insure the expenditure of the State's money according to a definite plan, and for such purposes as have been stated to the Legislature when requesting appropriations, it is recommended that the appropriation act stipulate that moneys granted for any single purpose, may be used for that purpose only, and that future appropriations be made in accordance with some such plan as the following: —

1. Central office: —
 - (a) Salaries of commissioner and office force.
 - (b) Traveling expenses of commissioner and office force.
 - (c) Printing.
 - (d) Office supplies.
 - (e) Office equipment.
2. Enforcement of laws: —
 - (a) Salaries.
 - (b) Traveling expenses.
 - (c) Supplies.
3. Propagation and distribution of fish and game: —
 - (a) Salary and expenses of deputy.
 - (b) Salaries and expenses of biologists.
 - (c) Sutton hatchery.
 - (d) Sandwich hatchery.
 - (e) Palmer hatchery.
 - (f) Adams hatchery.
 - (g) Martha's Vineyard Reservation.
 - (h) Norfolk State Hospital Reservation.
 - (i) Marshfield Reservation.
 - (j) Other game preserves.
 - (k) Development of shore fisheries (including purchase of lobsters with eggs).
 - (l) Miscellaneous.

The granting of appropriations in this or similar form, with the preparation of a proper accounting report at the end of each year, would provide for efficient administration and for adequate financial analyses for succeeding Legislatures.

The appropriations listed above are to be restricted absolutely to administration, maintenance and operation, and are not to be

used for construction. They may, however, properly be used for replacements, provided the new equipment and structures are not materially greater in cost than those which have become worn out. Separate appropriations should in all cases be made for all extensions, additions, new construction or other capital outlays. Each of these appropriations should be specific, and should be available only for the purpose specified. This is in marked contrast to the plan heretofore followed of allowing \$8,000 a year for five years, nominally for the establishment of fish hatcheries, but in fact used for any purpose, whether new work, maintenance, operation or administration, and in 1914 being used for maintenance of the hatcheries at Palmer and Sandwich.

Office Accounts. — The clerical work now performed in keeping accounts is sufficient to produce much more satisfactory results, provided efficient accounting methods are adopted. If the specific recommendations for improvements in methods here made are properly followed, no additional clerical services will be required, and the accounting work will be substantially improved.

With the exception of records of output and stock at the stations, the books of accounts should be kept at the central office, and all bookkeeping work done there so far as possible. Transactions relating to game farms and fish hatcheries in all cases should be stated on accounting documents which have been certified or otherwise approved by the superintendents or other officials having definite and first-hand knowledge of the facts. At the game farms and fish hatcheries careful records of quantities of fish, birds and farm produce should be kept. The only financial records needed at the stations are files of duplicate copies of such documents as are handled by the superintendents, including purchase orders for such goods as are ordered by them, requisitions made on the central office, sales slips, etc.

The present accounting methods in the commissioners' office are unsatisfactory and should be improved in the following respects: —

1. A ledger account should be kept for each appropriation, showing all receipts and all expenditures in summary form.

No book record is now kept for the purpose of showing the condition of each appropriation, but only a statement or report form (erroneously styled a "balance sheet"), which is not well devised for keeping an accurate record of the status of each appropriation.

2. The classification of expenditures into expense and capital items should be made currently and by some one having knowledge of the facts. Moreover, a property account should be currently kept for the buildings and permanent improvements at each fish hatchery and game farm, and a standard classification of expenses adopted for the detailed analysis book.

The present classification of expenditures on capital account is exceedingly crude, being made up at the end of the year by one of the clerks who reviews the expenditures and picks out such items as appear to her to constitute capital expenditures. The expenditures which are thus classified were made throughout the year for work performed or goods used at the game farms and fish hatcheries, and the expenditures are so reported as to make it impossible for any one, no matter how skillful an accountant, to differentiate capital items from expense items by reviewing the records at the close of the fiscal year.

3. A record should be kept of cash advanced from the State treasury to the clerk in charge of the office.

At present he keeps no record, but relies wholly upon his subvouchers when preparing the statement of expenses which he submits from time to time to the Auditor's office for settlement. The office cash is not kept distinct but is merged with other moneys. In the absence of any record it is impossible to tell the amount of State's cash for which the clerk is responsible, except by listing such subvouchers as he is able to produce. The State may not be in danger of losing under this method, but such a loose business practice should not be continued.

4. The equipment account, showing the quantities of equipment purchased for or issued to each of the stations, is now kept in such a way as to require an unnecessarily large amount of clerical work.

Cards or a loose leaf record book should be adopted which will be so planned and ruled as to provide a card or sheet for each article of equipment, with columns for date, reference to invoice number, quantities, stations, etc., thus making it necessary to enter only figures; whereas under the present method an unnecessary amount of writing is performed.

5. The present methods of preparing financial reports or statements for various purposes should be simplified.

At the end of each year a large number of financial reports or statements are prepared, containing some useful information, but an unnecessary amount of work is involved, since these reports to a large extent are not prepared according to a definite reporting plan. If an adequate classification or analysis of the expenditures were devised, accounts could be so kept as to enable statements or reports to be readily prepared from the accounts.

Records at Farms and Hatcheries. — No accurate records are kept at the farms or hatcheries as to the cost of construction or of maintenance and operation, and at several stations where efforts are made to keep records the figures differ materially from those prepared in the office of the commission. With a proper system of administration and accounting in the central office no financial records, other than files of accounting documents, should be kept at the game farms and fish hatcheries. The central office should furnish each superintendent from time to time with a statement or report showing the status of the appropriation or allotment for his station. Accurate records of all game, fish and farm produce should, however, be kept at each station, together with duplicate copies of requisitions, purchase orders, sales slips, etc.

The superintendents have failed to keep records of the purchase of goods and of bills paid by them. Moreover, regular employees are frequently placed on construction work and no record kept of the time spent on such work. For instance, at Sandwich last year a number of concrete pools were constructed, and regular employees were used in the work, but no record of the time was kept. At the Palmer hatchery, where the son of the superintendent is hired to keep records, the men were used in construction work, but no figures are available showing the time employed on that work. The same conditions exist at other stations. The superintendent at Sutton stated that while he has felt the need of records for some time he has never received any instructions from the commission and therefore has never kept any. The failure to keep time records, files of bills or vouchers for goods purchased, duplicate copies of purchase orders, and accurate records of the production at the game farms and fish hatcheries is open to criticism. In order to correct these unsatisfactory conditions the following recommendations are made: —

1. Whenever a superintendent is authorized to purchase goods he should use a form of purchase order similar to that used in the commissioners' office.

This order should be made in triplicate, one copy being sent to the person who is to furnish the goods, one copy being forwarded to the office of the Commissioners on Fisheries and Game with the bill or invoice, and the third copy retained by the employee ordering the goods. At present no record is kept by the superintendents of goods ordered by them.

2. Daily time reports should be kept.

These reports should indicate the amount of time chargeable to each class of work, such as caring for fish, caring for game birds, farming, repairs and replacements, and construction work. Statements summarizing such reports might be submitted to the office weekly as a part of the narrative reports, or might be submitted monthly. Time records would be of material assistance in insuring efficient administration as well as furnishing a basis for analyzing the pay rolls and determining the cost of different classes of work.

3. Records should be kept of the quantities of all birds, fish and farm produce raised.

These records should show the use or disposition made of all birds, fish and produce raised during the year or on hand at the beginning of the year.

4. Bills for goods purchased by the superintendents should be certified as to the quantity of goods received, the quality and condition of the goods and the correctness of prices.

It was stated by an official of the commission that it has been the intention to require the superintendents to certify as to the correctness of bills. This practice should be adopted so that responsibility may be definitely placed for the correctness of all bills incurred by the superintendents of stations. Moreover, each superintendent should indicate on each bill or invoice the amount chargeable to expense and the amount chargeable to capital account.

Receipts from Sales at Hatcheries. — Cash received from sales made by the superintendents of game farms and by other employees should, whenever practicable, be forwarded to the office of the commission by the party purchasing the goods, and the superintendent or other official making the sale should submit a statement of sale to the office showing the amount due. As a rule, the superintendents should sell produce only on authorization from the central office. The necessity for central control

over the collection of revenue is as great as the need for control over expenditures. Heretofore the superintendents have sold farm produce and other goods, held the cash so received, and utilized it for the payment of bills contracted by them for the Commonwealth, and absolutely no accounting, either for the cash sales or for the bills settled with such cash, has been made either to the commissioners' office or to the State Auditor. Moreover, in one case the superintendent of a hatchery, when visited by agents of the commission, was unable to account for approximately \$90 which he received from the sale of produce. Subsequently, the superintendent stated that the \$90 in question had been expended for grain, but no receipted bills or vouchers of any sort have been produced in connection with this transaction.

Receipts from Hunters' Licenses. — Cash received from the issue of hunters' licenses by city or town clerks, which amounted to \$64,966.85 in 1914, should not be received by the chief clerk in the office of the Commissioners on Fisheries and Game, but the remittance should be made directly to the State Treasurer's office by the city or town clerks. Under the present arrangement the moneys received by the chief clerk are turned over to the State treasury once each month. The work necessary for the receipt and accounting for these moneys could be done to better advantage and probably with less expense to the Commonwealth in the Treasurer's office, and the money could be used to better advantage by the State if immediately placed in the State treasury rather than held temporarily in a separate account, although we recognize that the present practice is in accordance with existing law.

TRAVELING EXPENSES OF COMMISSIONERS.

In general it may be stated that State funds have been expended for personal expenses, such as travel between home and office, carriage from station to home, hotel expenses and meals in Boston, and fees. The expense accounts also include excessive telephone charges, expenses for lectures for which there is no authority and for unwarranted entertainment. Until recently full fare has been charged for all trips made by the commissioners, when a substantial saving could have been made to the Commonwealth by the use of mileage. Members of the commission have made trips outside the State for which no authorization was granted by the Governor. Some of these abuses have been investigated by the Auditor's office, and small

amounts were refunded to the Commonwealth by Commissioners Adams and Field as a result of such investigation.

The traveling expenses of the three commissioners for the year 1914 amounted to \$3,312.11, and were paid in part from the appropriation for traveling expenses and in part from the appropriations for propagation of food fish, propagation of game birds, and enforcement of law. The following statement shows the amount expended by each commissioner for travel inside and outside of the Commonwealth:—

Traveling Expenses during 1914 of Commissioners on Fisheries and Game, as shown by their Records.

	Total.	In Mass-achusetts.	Outside the State.
George W. Field,	\$1,453 71	\$859 71	\$594 00
George H. Graham,	1,320 00	1,247 27	72 73
William C. Adams,	538 40	462 87	75 53
Totals,	\$3,312 11	\$2,569 85	\$742 26

A statement relative to the expense accounts of each commissioner, so far as paid from the appropriation for "traveling expenses," follows:—

Dr. George W. Field.

Following is a summary of the expenses of Chairman George W. Field for the fiscal years 1913 and 1914, which were paid from the appropriation for traveling expenses:—

	1913.	1914.	Total.
Railroad fares between Boston and Sharon, . . .	\$30 80	\$16 80	\$47 60
Carriage hire, Sharon,	18 00	11 25	29 25
Meals and hotel in Boston,	138.50	187 25	325 75
Electric car fares,	9 20	11 13	20 33
Railroad fares other than between Boston and Sharon,	290 27	466 42	756 69
Carriage hire,	45 69	77 20	122 89
Meals and hotel, outside Boston,	265 19	390 04	655 23
Telephone and telegraph,	52 56	38 94	91 50
Gratuities,	12 10	11 55	23 65
Fruit,	3 94	2 25	6 19
"White Rock,"	4 25	3 05	7 30
Miscellaneous,	9 53	41 52	51 05
Totals,	\$880 03	\$1,257 40	\$2,137 43

The above table shows that \$47.60 was spent for railroad fare between Dr. Field's home in Sharon and Boston during 1913 and 1914. Dr. Field made a refund of \$12.60 in December, 1914, and a previous refund of \$6.18, mostly on items of railroad fare between Sharon and Boston. By a ruling of the Attorney-General these are not proper charges against the Commonwealth. In a conference with the chairman of this commission on July 21, 1914, Dr. Field stated that these charges had been called to his attention, but that he considered them a matter of conscience.

Moreover, Dr. Field has always charged the full single fare, namely 40 cents, for transportation between Sharon and Boston. One of three types of commutation tickets may be used between Sharon and Boston which makes the cost of a single trip 35, 28 or 23 cents. At a hearing with the Commission on Economy and Efficiency on March 6, 1915, Dr. Field stated that he uses one of the three types of commutation tickets or the full fare (40 cents) ticket, depending on the train on which he is traveling. From this it appears that Dr. Field has been overcharging the Commonwealth for travel between Sharon and Boston.

During 1913 and 1914 Dr. Field charged \$29.25 for carriage hire in Sharon. Inasmuch as Sharon is his home and the office is located in Boston this amount is an improper charge. Prior to the time when Dr. Field was notified by the Auditor's office that carriage hire in Sharon is an improper expense he charged on an average of three or four rides a month.

Item 3, "hotel and meals in Boston," amounted in the two years to \$325.75. Inasmuch as the office of the commission is located in Boston it would appear that this amount is wholly unwarranted.

Railroad fare, exclusive of fares between Sharon and Boston, amounted to \$756.69. A considerable saving in this amount might have been effected by the use of mileage. In some instances no authorization for travel outside of the State can be found.

Charges for meals and hotel outside of Boston in the two years amounted to \$655.23. This item includes two bills for expenses incurred in attending a convention in New Orleans in 1914. The first bill (Auditor's warrant No. 1366) includes charges for breakfast, lunch and dinner for each day from Nov. 16 to Nov. 30, 1914, a total of \$42.80 for the fifteen days. The second bill (warrant No. 1749, voucher 12) includes \$26.60 billed directly by the St. Charles Hotel, New Orleans, for restaurant charges for the same period, namely, Nov. 16 to Nov. 30, 1914. When first

questioned regarding this apparent duplication in charges, Dr. Field stated that the amount (\$26.60) billed by the hotel was for his meals. Some days later when questioned again regarding the apparent duplication in charges, Dr. Field stated that the amount billed by the hotel (\$26.60) was largely for a dinner given by him to some of the delegates to the National Association of Conservation Commissioners. It has been held by the Auditor's office that State officials cannot expend their appropriations for entertainment of visiting officials, and it is our opinion that an expenditure for this purpose in New Orleans was improper.

The telephone and telegraph charges for the past two years amount to \$91.50. This includes calls from his home in Sharon to the office in Boston.

The miscellaneous items include stenographer's fees, provisions, postage, etc., and amount in the two years to \$51.05.

Dr. Field lectures in different parts of the State, and charges the resulting expenses to the Commonwealth, although no authority for such practice is given by law.

George H. Graham.

Following is a summary of the expenses of George H. Graham for the fiscal years 1913 and 1914, so far as paid from the appropriation for traveling expenses:—

	1913.	1914.	Total.
Electric car fares,	\$1 45	\$11 45	\$15 90
Railroad fares,	168 82	274 85	443 67
Carriage hire,	50	54 70	55 20
Meals,	88 30	170 75	259 05
Hotel,	40 85	95 19	136 04
Telephone and telegraph,	131 86	280 35	412 21
Miscellaneous,	4 60	16 85	21 45
Totals,	\$420 38	\$904 14	\$1,343 52

Mr. Graham's expenses for 1914 were more than double those for 1913.

Mr. Graham has two telephones in Springfield and charges up all calls on his home telephone and all toll calls on his business telephone to the Commonwealth.

Mr. Graham on one occasion charged for a trip outside of the State for which no authorization is shown.

In connection with railroad fares it should be explained that Mr. Graham lives in Springfield, and a large part of this item it spent for attending meetings of the commissioners at Boston.

William C. Adams.

Following is a summary of the expenses of William C. Adams for the fiscal years 1913 and 1914, so far as paid from the appropriation for traveling expenses:—

	1913.	1914.	Total.
Car fares between Boston and his home, . . .	\$5 83	\$8 68	\$14 51
Meals in Boston,	11 45	42 90	54 35
Electric car fares,	1 40	3 47	4 87
Railroad fares,	39 68	135 02	174 70
Carriage and auto hire,	15 54	76 48	92 02
Meals outside Boston,	27 40	95 25	122 65
Hotel outside Boston,	9 90	34 05	43 95
Telephone and telegraph,	20	37 86	38 06
Miscellaneous,	—	6 90	6 90
Totals,	\$111 40	\$440 61	\$552 01

Mr. Adams was appointed in August, 1913, so that his expenses for that year cover the period from August 7 to November 30.

Concerning the charges for fares between his home and the office it should be stated that Mr. Adams discontinued making such charges when they were questioned by the State Auditor.

With regard to the charges for meals in Boston there is a question whether any of these are proper charges, since Mr. Adams' business office and home were located in Boston. These charges amounted to \$54.35 for 1913 and 1914.

In a conference with this commission Mr. Adams stated that he had twice been outside of the State without authorization, and had charged his expenses to the Commonwealth.

ANNUAL REPORT.

The latest annual report published by the Commissioners on Fisheries and Game is that for the year 1911. A consolidated report for the years 1912 to 1914, inclusive, is now being

prepared. The statutory provisions relative to the annual report of the Commissioners on Fisheries and Game are found in chapter 291 of the Acts of 1903, which reads as follows:—

SECTION 1. The annual report of the board of commissioners on fisheries and game shall hereafter include the year ending on the thirty-first day of December, and shall be submitted on or before the fifteenth day of January next following.

SECTION 2. This act shall take effect upon its passage.

This act is affected by section 1 of chapter 211 of the Acts of 1905, which changed the fiscal year of all offices, departments, boards, commissions, etc., from December 31 to November 30, and which requires that —

... the annual reports, of all officers, trustees, boards and commissions, except the report of the insurance commissioner and except those reports otherwise provided for in this act, shall be made to the governor and council, or to the general court, as now required by law, except that they shall be made on or before the third Wednesday in January, anything in any general or special statute now existing to the contrary notwithstanding. . . .

The number of copies of the annual report is fixed at 2,000 by section 7 of chapter 9 of the Revised Laws.

The following quotation is made from the stenographic report of a hearing held on March 6, 1915, with the Commissioners on Fisheries and Game:—

Q. What does the law state upon that point as to the rendering of reports by your commission? A. It says they shall be rendered. I don't think it fixes the time; it has simply been physically impossible to prepare them with such assistance as we have had.

At another time during the same hearing it was stated by the chairman of the Commissioners on Fisheries and Game that "we have not published our report; we have not had the money available which would be necessary to publish reports." The latter statement is not an adequate reason for failure to publish an annual report in 1914, when there was an unexpended balance of \$760 in the appropriation available for the printing of such a report. The cost of printing the annual report for 1910 and the special report on quahaug and oyster fisheries was \$1,293.31, which was paid in 1912; the cost of the report for 1911 was \$604.07, which was paid in 1913.

The failure to publish annual reports for 1912 and 1913 was not due to any specific reason, so far as this commission can ascertain, but such failure was the result of carelessness, and is indicative of the general laxity which characterizes the administration of the department.

METHODS OF PURCHASING SUPPLIES.

At present, grain and other supplies for the game farms and fish hatcheries are purchased in small lots, and frequently the purchases are made by the superintendents of the stations. Certain standard articles could with advantage be purchased in quantities by the central office on orders which call for shipments to the several stations. Such a method would procure the advantage of competitive bids with lower prices than have been paid in the past, and exact specifications as to the quality of goods could be more effectively worked out than is possible under the present plan. This subject was called to the attention of the chairman of the commission, who agreed that economies might be effected by buying certain goods through the central office.

It is recommended that a careful study be made so as to definitely ascertain what classes of goods may be purchased to better advantage by the central office than by the superintendents.

ENFORCEMENT OF LAW.

The present management of the deputies employed for the enforcement of law is open to severe criticism because of the wholly inadequate direction of their work by the commissioners or by the chief deputy. The chief deputy exercises but very limited control over the district deputies, and spends the greater portion of his time in the office in Boston. Moreover, such visits as he has made to stations and towns have not been for the purpose of directing the work of the district deputies but in connection with some special work, such as assisting in shipments of fish, etc. It is evident that a force of twenty-eight district men scattered throughout the Commonwealth will not perform their work effectively when under slight supervision. The system of narrative reports now in use is excellent, but a system of reports is not adequate for insuring the proper performance of duties.

The chief deputy in charge of the district agents should spend the greater portion of his time in travel, and only the smaller part in the office at the State House. The increase in traveling expenses, resulting from adequate and close supervision over

the force, would bring results in increased efficiency which would fully justify the expenditure. Close supervision on the part of the chief deputy would benefit not only the work of the State district deputies, but also that of the local wardens who, by provision of law, "act under the authority and instruction of the commissioners."

The number of arrests made by each deputy commissioner in 1914, as shown on a preceding page of this report, ranges from 0 to 73, and may be summarized as follows:—

- 1 deputy made no arrests.
- 6 deputies made from 2 to 9 arrests.
- 10 deputies made from 10 to 19 arrests.
- 5 deputies made from 20 to 29 arrests.
- 4 deputies made 30 or more arrests.

While the number of arrests made by a deputy does not necessarily indicate the effectiveness of his work, yet if a man assigned to a locality where extensive hunting and fishing are carried on fails to make arrests, it at least raises questions as to his efficiency.

In District 1, which comprises Nantucket, and District 2, which comprises Martha's Vineyard, it is evident that changes may be made to advantage. In District 1 the deputy made no arrests in 1914, and in District 2 the deputy made only two arrests, and yet it has been stated by the Commissioners on Fisheries and Game, and by other persons who are familiar with conditions, that the islands of Nantucket and Martha's Vineyard require most careful policing, as there is a tendency for violations to occur there, particularly on the part of visiting sportsmen and summer residents. Such evidence as is available indicates that the laws have not been as carefully enforced as they should be. There is little or no excuse for any laxity, since a deputy is employed on each island at a salary of \$1,200 per year.

On Martha's Vineyard the Commissioners on Fisheries and Game employ a superintendent of the game farm at \$1,200, and two farm laborers in addition to the district deputy. This force is unnecessarily large, and is relatively greater than that employed in any other district. The duties of the superintendent of the game farm are principally to carry on farming operations so as to insure a supply of grain for the heath hens, and to properly safeguard the game farm, and, so far as possible, the heath hens. These latter, however, are not confined on the

game farm but are at large on the island. Taking into consideration the size of the district as compared with other State districts, the nature of the work required of the superintendent of the game farm, and the assistance which is furnished him, this commission is of the opinion that the superintendent of the game farm can also act as district deputy, a position in which he had experience prior to his appointment as superintendent of the farm at Martha's Vineyard.

Moreover, it is believed that Martha's Vineyard and Nantucket should be consolidated into one district for the enforcement of law. In order to properly police the two islands, the superintendent should be given an assistant deputy who would be available for duty on either island as directed by the superintendent. For such work as would be required of an assistant deputy in this district, a competent man could be procured for materially less than \$1,200, the salary now paid the deputy on Nantucket. While opposition may be advanced to the plan here proposed, the commission after careful consideration of the situation has been unable to discover any real objection to the plan, which would effect a saving of at least \$1,200 per annum in salaries, and in our opinion would insure enforcement of the law.

As previously pointed out in this report, the appropriation for the enforcement of law under the Commissioners on Fisheries and Game has been used for many other purposes, such as the maintenance and operation of game farms and fish hatcheries. This practice has to a large extent been corrected since questioned by the Commission on Economy and Efficiency, but it still exists to a limited extent. The expenditure from the appropriation for the enforcement of law of over \$3,000 for biologists, reservations for birds, and certain other expenses is bad practice, even if not in a strict sense illegal.

Another feature of the enforcement of law which should receive careful consideration is the maintenance by the District Police of the steamer "Lexington" for patrolling Buzzards Bay. Exclusive of the salary of the detective in charge, the amount expended for this steamer during 1914 was \$9,475.27, or over 21 per cent. of the amount expended by the Commissioners on Fisheries and Game for the enforcement of fish and game laws throughout the Commonwealth. In view of the limited area patrolled by this steamer, the cost is clearly excessive. The detective of the District Police who serves as captain of the steamer receives a salary of \$2,000 per year, or \$500 more than the chief deputy in charge of the twenty-nine deputies of the

Fish and Game Commission. The officer's salary is clearly an excessive amount to pay a man who has such limited work as that of captain of a steamer patrolling only Buzzards Bay. Of the force employed on this steamer, the engineer, his assistant and the steward are paid annual salaries sufficiently large for full-time service, but for about six months of each year they have no work other than making repairs and painting the steamer. The annual pay roll for this steamer is over \$1,500 larger than can be justified. Moreover, it is a grave question whether a steamer as large and as expensive to operate as the "Lexington" is needed for the enforcement of law, but it is perfectly evident that if such a steamer is to be used in this work she should patrol a much greater area than Buzzards Bay. Even with a material reduction in expense, this steamer should patrol, in addition to Buzzards Bay, all waters around Martha's Vineyard and Nantucket.

DEVELOPMENT OF SHELL FISHERIES.

The Commissioners on Fisheries and Game are of the opinion that the cultivation of mollusks may be made commercially profitable, and they further believe that extensive and satisfactory development can be had only under central State control of the shell fisheries. Their recommendation that they be given control over the shell fisheries, and their contentions as to present conditions and future development, have been set forth at length before legislative committees and elsewhere.

On Jan. 29, 1913, the Commission on Economy and Efficiency submitted a report to the General Court in which among other recommendations was one suggesting a limited form of State control, provided that the plan were adopted "by a majority vote of the town at an annual or special town meeting." Briefly stated, the plan recommended by this commission provided that in towns voting to adopt it, the territory available for the growth and planting of mollusks should be leased by the State Commissioners on Fisheries and Game in accordance with prescribed conditions. The suggested plan provided that not more than one-half of the available territory should be leased, the remaining half, unless voted to the contrary in town meeting, should be retained as a public fishery. It was further provided that in making leases preference should be given to the holders of oyster, clam and quahaug grants under the present laws, and to residents of the town in which the territory is located.

At the time the Commission on Economy and Efficiency made

the recommendations referred to, certain conditions surrounding the shell fisheries were deemed susceptible of improvement, and it is believed that such conditions have not been satisfactorily changed. At present there is unfortunately a large amount of special legislation applicable to individual towns and cities. While special statutory provisions may be required to meet unusual conditions in some localities, yet a reasonable amount of standardization and uniformity is desirable. This fact is gradually being realized by the persons interested in the shellfish industries and a bill (House 1793) was introduced in the Legislature on March 3 of the present year for the purpose of extending throughout Barnstable County the statutory provisions which then applied to the town of Barnstable. This is cited as an illustration of unsatisfactory statutory provisions, the improvement of which was sought by a legislative act applicable to all the towns within a single county.

The Commonwealth as a whole, not only the inhabitants of the shore towns, is interested in increased production of shellfish for food, and is further interested in the development of such a system of public control as will insure the receipt of public revenue in exchange for any valued privilege or grant which may be allowed to private enterprise. In order to develop the industry it is evident that stability of public regulation and public policy must be assured, and it is claimed that in the past such stability has frequently been lacking. Moreover, the statutes setting forth restrictions, which to a certain degree are necessary when dealing solely with natural sources of supply, must be supplemented by new laws when a policy is adopted for the encouragement of cultivation by artificial means.

State control in place of local control has been suggested as a means for correcting such present conditions as, it is believed, are susceptible of great improvement. Opposition to State control has naturally developed on the part of shore towns. While certain theoretical advantages may logically be claimed for centralized State control, yet it is the opinion of this commission that such control at the present time is not practicable. We are, however, of the opinion that many improvements may be made in the present conditions through the enactment of laws which will provide a reasonable amount of uniformity in the conditions under which fisheries may be conducted in the several shore towns, and which will clearly set forth the conditions under which privileges or grants may be made by the towns. If the statutes were amended so as to define reasonable conditions

under which clams and other shellfish might be cultivated, and to insure stability of public policy, it is our belief that much more rapid development of the Commonwealth's natural resources in shell fisheries will follow than can result under present statutes.

It is the opinion of this commission that local or town control should be continued over the granting of fishing rights and privileges, but that such control should be exercised in accordance with new statutory provisions.

The most important result to be sought by statutory amendments is the building up of the shellfish industry so as to increase our food supply. A secondary result to be sought is the securing of additional public revenue if such can be had without proving too heavy a tax upon the development of the industry. It is the belief of this commission that additional revenue may be secured, providing new conditions and terms are adopted as a prerequisite to the granting of fishing privileges. A specific instance will assist in illustrating this commission's contention. The town of Plymouth has granted to the Andrew Kerr Company over 200 acres of clam flats in Plymouth Bay. This grant is for a fifteen-year period, and no payment or other consideration was made by the company to the town. That the Kerr company, which is authorized to issue \$500,000 of capital stock, considers the grant made by the town of Plymouth a most valuable asset is evident from its literature. In a circular issued by that company the following statement is made:—

As the result of a scientific investigation of all the available areas for clam culture on the Atlantic coast, from Florida to Maine, the one point which possessed all the advantages of naturally productive flats, accessible to first-class shipping facilities, and in the center of a populous community, was found at Plymouth, Mass.

In January, 1912, the town of Plymouth procured an amendment to the Acts of 1870 relative to the cultivation of shellfish in Plymouth Harbor, enabling it to grant its flats at its own discretion for fifteen-year periods, and shortly afterward a large grant containing over 200 acres of the choicest of the Plymouth flats was awarded to Mr. Andrew Kerr after due investigation as to his eminent qualifications for properly developing the industry. This is by far the most comprehensive and favorable clam grant ever given in the United States. Since its acquirement Mr. Kerr has fully demonstrated, on a large commercial scale, the complete practicability of clam propagation as a highly remunerative industry, and has at the present time, on less than 100 acres, an estimated content of 100,000,000 marketable clams of a quality unsurpassed, if indeed ever equalled, on the Atlantic seaboard.

It has been stated to this commission that the Kerr company has capitalized its grant by the town of Plymouth at \$75,000. It seems reasonable that the town of Plymouth should receive some direct benefit in the way of public revenue from the Kerr company in exchange for this valuable grant, especially when it is recalled that prior to the making of this grant the flats now controlled by the Kerr company were utilized solely by the general public. If what was formerly a public privilege is made a special privilege the town should be compensated. The question of the amount of the tax and the time when it should be imposed should naturally receive careful consideration, and should be so adjusted as to constitute a reasonable payment on the part of the Kerr company for a valuable franchise gained by them.

In Rhode Island the control of the shellfish industry is in the hands of the State, which derives an annual revenue of approximately \$135,000 therefrom. Conditions in Rhode Island are materially different from those in Massachusetts, particularly with respect to the location of the shell fisheries. These are, to a large extent, so far distant from the shore as to make local or town control much more difficult than in the case of the Massachusetts fisheries. It is evident that any effective control other than State would be difficult in Rhode Island, whereas it is believed that in Massachusetts effective control may be exercised through the town, provided the proper statutory provisions are enacted.

No attempt is made by this commission to submit any suggested acts in amendment of the fishery laws, since the preparation of proposed legislation of this type should be undertaken only after an exhaustive study of this question, for which this commission has had no opportunity. In order that this important question may receive adequate attention it is recommended that the Commissioner on Fisheries and Game to be appointed upon the reorganization of the department should report to the General Court on methods of procedure for developing the shellfish industries, with drafts of proposed legislation to correct present unsatisfactory conditions and to facilitate the production of shellfish.

PROPAGATION AND DISTRIBUTION OF FISH AND GAME.

Establishment and Development of Game Farms and Fish Hatcheries. — The establishment and development of the game farms and fish hatcheries have been unnecessarily expensive because of the purchase in the first instance of properties not well adapted

to the raising of game and fish, with the result that it has become necessary to purchase or lease additional properties. Expenditures of considerable sums might have been avoided if an adequate plan of development had been adopted after a careful survey of the character of land, water supply and other conditions essential for game farms and fish hatcheries.

An instance of poorly planned development is found at the game farm at East Sandwich, where the State owns 4½ acres, which the commissioners and the superintendent of the farm state is wholly inadequate for raising game. Accordingly, the Commissioners on Fisheries and Game in August, 1914, rented at East Sandwich from Lila M. Hitchings, the wife of the superintendent at Sandwich, about 50 acres for the extension of the game farm, and have spent, according to the estimates of the superintendent, about \$2,800 on improvements made on the rented property. Now it appears that they have no place on this property suitable for raising ducks, and so the commissioners requested an appropriation to build a duck pond on the Nye farm, another rented property, on which is located part of the fish hatchery at East Sandwich.

In the superintendent's opinion, "it will be absolutely necessary to either lease or buy the Nye property in order to raise ducks for the game farm, as all the other birds are raised on the Hitchings' farm where there are no facilities for raising ducks." The money expended for the game farm at Sandwich could have been used to much greater advantage if additional development had been conducted at Marshfield or other reservations in place of that at East Sandwich. At Marshfield, which is about 20 miles from Sandwich, the State has established a game reservation on 5,000 acres of privately owned land, the control of which was taken over under the provisions of chapter 410 of the Acts of 1911. The conditions at this place are ideal for raising such game birds as are now being produced at East Sandwich; in fact, the Marshfield reservation appears to be better adapted for raising game birds than any other of the State reservations or game farms. Moreover, the expense at Marshfield is materially less than at East Sandwich, since no rent is charged by the owners at the former place, who have made a five-year agreement with the Commonwealth. The superintendent at Marshfield states that there will be no difficulty in obtaining the consent of the owners to keep the land indefinitely for the propagation of game birds.

Another instance of failure to properly investigate before purchasing land is found at the Palmer hatchery, which was established without adequate knowledge of the water supply available for producing fish. The State in 1912 purchased 233 acres of land at Palmer because the Commissioners on Fisheries and Game claimed it was an ideal place for a hatchery. In spite of this claim and of the statement of Dr. Field as late as July 1, 1914, that the water was eminently satisfactory for the work, it has been lately discovered that the water supply is not suitable, and that it is necessary to buy 80 acres of adjoining land in order to secure an adequate water supply and to properly utilize the investment already made by the Commonwealth. A request for an appropriation to purchase additional land was submitted to the Legislature, although the chairman, Dr. Field, had never been on the property.

These instances are mentioned to bear out the recommendation that a survey should be made before any further money is expended for the development of the stations.

Administration of Game Farms and Fish Hatcheries. — The failure to effectively control the work of the hatcheries is evidenced by the fact that the commissioners have not regularly or systematically directed the work at each station. The number of visits made at each station by the commissioners indicates clearly that these visits have not been made in accordance with systematic oversight of the work. The record of visits, as given to an agent of this commission by the superintendents at the several stations, shows that frequent visits were made at Sandwich; that Mr. Graham visited weekly during the summer, and monthly during the winter, the stations at Wilbraham and Palmer; that the other two commissioners also visited these two game farms several times in 1914; but that the stations at Adams, Sutton, Norfolk and Marshfield were seldom visited, the hatchery at Adams being visited during 1914 only once by Dr. Field and Mr. Graham, and never having been visited by Mr. Adams.

Laxity of administration is also seen in the failure to properly handle and account for farm products at the several stations. It has been a common practice for the superintendents of the stations to sell eggs and poultry belonging to the State and to use the money for buying grain, supplies, furnishings and other things for the farms. For instance, during the agent's visit to Sutton it developed that between February, 1914, and December, 1914, the superintendent sold to one firm \$175.99 worth of eggs.

The superintendent showed credit on grain bills for \$64.39, and had in his possession a check for \$21.52, but no record of the balance of \$90.08 could be found. Later, the superintendent made up a statement showing how this money was spent, but he has not produced receipts or vouchers for the full amount. It also was learned that he had sent to the chief clerk of the commission's office in Boston during April and May of last year 22 dozen of eggs for which no bill was rendered. Subsequent to the disclosure of this fact by the Commission on Economy and Efficiency a bill for these eggs was submitted. The superintendent also had in his possession \$8 from the sale of 8 roosters, which he stated were the first that he had sold. Later it was discovered that the superintendent had been in the practice of selling poultry for years.

At Sandwich it was discovered that the State had bought 100 chickens, raised them at the game farm, and then the superintendent sold over half of them to the original owner. The rest were sold to the wife of the superintendent of the game farm and to the superintendent of the fish hatchery. The superintendent stated that the money received from the sales was expended for supplies for the game farm. No record of any of these transactions is received either by the Commissioners on Fisheries and Game or the Auditor's office. This is a very unbusinesslike and dangerous proceeding and should be stopped immediately.

Accurate records of all game, fish and farm produce should be kept at each station. At present some superintendents keep no records and others keep only imperfect ones. A well-arranged form of annual report is now used by the superintendents in reporting to the office the output of their farms and hatcheries, but this report is now too largely based on guesswork.

The statements of the output of the hatcheries submitted by Dr. Field on behalf of the Commissioners on Fisheries and Game are misleading in many particulars, and the figures on the value of output are greatly in excess of the actual value. For example, the statement takes credit for 1,500,000 trout eggs produced at Sandwich. These eggs were shipped to Adams and Sutton and credit is taken for the full value of the hatched fish at these stations. Sandwich shipped 30,000 young fish to the Palmer hatchery and credit is given both hatcheries for these fish. Full credit is given Palmer hatchery for 8,150,000 yellow perch and 16,750,000 pike, although all of these fish were hatched from eggs received from the Federal government and kept at Palmer only three or four weeks. Both the Sutton and Palmer hatchery

receive credit for 34,000 salmon, hatched from eggs furnished by the Federal government, which were sent from Sutton to Palmer, and afterwards distributed from there. The commission's statement gives credit for 670 pheasants and 616 ducks at Sutton, when the actual output was 569 pheasants and 565 ducks. At Sharon credit is taken for 278 pheasants and 98 ducks, when the actual output was 234 pheasants and 88 ducks. At Wilbraham, although there were 45 less quail at the end of the year than at the beginning, and none were distributed, credit is taken for 10 quail, also for 1,059 pheasants and 613 ducks, although the actual output, as taken from the superintendent's figures, was 925 pheasants and 576 ducks. It should be understood that while we cannot rely on the figures of the superintendents as being accurate, they are the only figures available, and form the basis of the statement on output submitted by Dr. Field, which is subject to criticism because of the manner in which the superintendents' figures have been tabulated and summarized.

In considering the cost of operating the department it is significant that the appropriation estimates as submitted by the superintendents to the commissioners have been materially smaller than the amounts requested by the commissioners for the support of the several stations. In nearly every instance the estimates submitted by the superintendents for the fiscal year 1915 were increased by the commission. The superintendents advised an agent of this commission that they knew of no necessity for the increases, and the only reason advanced by the commissioners was that sometimes they planned work of which the superintendents knew nothing. When asked for details and specific instances the commissioners then stated that they had submitted their estimates prior to receiving those of the superintendents.

In view of the extreme laxity in administration, the excessive cost of game farms and fish hatcheries, and the very small number of birds produced, it is believed that careful consideration should be given to the policy of purchasing fish and game for purposes of restocking the natural supply in place of the present system of production.

Comments and recommendations on several of the game farms and fish hatcheries are given in the following statements: —

Adams Hatchery. — This hatchery could easily be developed to twice its present capacity and pools constructed for developing the fry to fingerlings before distribution, as the conditions there are excellent for raising fish, the water never varying from 42°.

We recommend that this plan be given careful consideration, as fingerlings are able to take care of themselves, but fry easily become the prey of larger fish.

Martha's Vineyard Reservation. — The present superintendent assumed control two years ago, and has developed over 50 acres which contained nothing but scrub oak into fine farm land, and has raised some stock. If this farm is to be retained for the raising of heath hens or any other kind of game birds we recommend that the 600 acres of State land be developed as far as practicable.

East Sandwich Hatchery and Farm. — According to the statement of the superintendent about \$2,800 has been expended for improvements on the rented land. After an examination of the State's property on this land it is estimated that \$800 is a liberal value to place upon it. In any event it appears unwise for the State to expend any more money for permanent improvements on rented property.

According to figures furnished by the commission the expenditures during the year for the bird farm, including the purchase of some stock, were \$3,859.83. This amount seems an exorbitant expenditure for raising 300 or 400 quail (exact figures are not available) and 15 or 20 ruffed grouse.

In view of these conditions, and of the claim of the commissioners and superintendent that more land is necessary if the farm is to be properly developed, we recommend the immediate discontinuance of the game farm at East Sandwich and the removal of the State's property to the reservation at Marshfield or other reservations.

Wilbraham Game Farm. — Absolutely no records are kept at the farm, and it is impossible to obtain any definite information in regard to the cost of operation, as the superintendent buys and sells produce and does not even keep the original bills. The superintendent stated that no instructions had ever been given him by the commission to keep a record of the expenditures or the amounts received for eggs, produce and poultry.

Inasmuch as it is only a short distance from the Wilbraham farm to the hatchery at Palmer, where the State owns 233 acres of land suitable for raising game, and has an option on 80 additional acres, we recommend that the Wilbraham game farm be sold and the equipment and stock be transferred to the reservation at Palmer. A considerable saving could be made by this consolidation, inasmuch as the expense of operating a larger station at Palmer would be materially less than the expense for the

two stations now maintained. No reason has been advanced by the Fish and Game Commission why birds would not thrive fully as well at Palmer as at Wilbraham. There is no difference in the expense of distribution from the two stations. The farm at Wilbraham could readily be sold or rented by the State.

Norfolk State Hospital Reservation. — The expense for this reservation during 1914 appears clearly excessive when measured by the number of birds produced and cared for during the year. Breeding pheasants can be purchased for \$3.50 each, according to figures submitted by the Fish and Game Commissioners, but the cost per bird raised at Norfolk was twice the market price.

The Norfolk hospital grounds are well adapted for use as a game farm, and it is believed that the maintenance of a reservation there offers excellent opportunity for the employment of inmate labor. Efforts should be made, however, to reduce the expenses, which can be effected by careful administration.

Marshfield Reservation. — The total expense incurred last year at Marshfield was only \$655.66, including the salary of the superintendent. This reservation appears to be not only the most economically, but also the most efficiently, managed game farm under the control of the Commissioners on Fisheries and Game. Flocks of quail and other game birds are much in evidence, and the superintendent's methods of producing and raising wild birds appear to be effective and satisfactory.

The conditions at Marshfield permit of its development to at least three times its present capacity, and, as previously stated, we recommend that the game farm at East Sandwich be discontinued and that a part if not all of the State's equipment and stock of game birds at that station be transferred to Marshfield.

Sharon Reservation. — The amount of money expended during 1914 was \$1,548.26, which appears excessive when compared with the production for the year, which amounted to 234 pheasants, 88 ducks and 6 quail.

The conditions under which the Sharon reservation is maintained are open to severe criticism. The State's activities are so completely intermingled with the private business of Dr. Field, whose sister owns the land used for the State reservation, as to render satisfactory administration impossible. Stock and supplies purchased by the State and stock owned by Dr. Field are utilized in much the same manner as they would be if the Commonwealth and Dr. Field were partners in a single business undertaking. Several specific instances are given for the purpose of clearly indicating the conditions.

The superintendent stated that on May 6, 1914, 2,500 young pear, apple and quince trees arrived at the farm addressed to him as superintendent of the game farm. He paid the freight on these trees, although he could not understand what use could be made of them by the Fish and Game Commission. These trees are now planted on Dr. Field's farm. When this matter was taken up with the Fish and Game Commission, Mr. Adams and Mr. Graham stated that they had no knowledge of the purchase of any fruit trees, although they remember sanctioning the purchase of hard-berry trees and shrubs. Dr. Field stated that the fruit trees were ordered from France at the same time that the other trees had been purchased. The fruit trees were shipped to Sharon and the other trees were distributed to the other stations.

The superintendent has found it impossible to keep the State's fowl separate from those owned by Dr. Field, and stated that many arguments were held over using the feed purchased by the State for Dr. Field's fowl. At the time of the agent's visit all of the fowl belonging to the State were found in Dr. Field's yard intermingled with his flocks.

Many contradictory statements have been made regarding a flock of 100 white Plymouth Rock hens at Sharon. At a hearing before this commission on Aug. 25, 1914, Dr. Field testified that these 100 hens belonged to his foreman, Mr. Shedd, and that he himself had no hens. It has since developed that Dr. Field in March, 1914, brought these 100 chicks, then a few days old, to the superintendent of the Sutton hatchery and had them raised there. No mention was made to the superintendent concerning the ownership of the hens, and they were fed with the State's grain while at Sutton. In May they were shipped to Sharon at the direction of Dr. Field. At a hearing before this commission on March 6, 1915, Dr. Field retracted his statement given at the hearing on August 25 and stated that these hens were his personal property. Mr. Shedd, Dr. Field's foreman, stated to an agent of this commission that he was not sure whether the hens belonged to Dr. Field or the State.

In the face of the existing conditions we recommend that the station at Sharon be discontinued and all of the State's property transferred to the reservation at Norfolk.

APPENDIX A.

OFFICIALS AND EMPLOYEES IN DEPARTMENT OF FISHERIES AND GAME, TOGETHER WITH RATES OF COMPENSATION.

The classes of officials and employees in each group or division, together with the rates of compensation on March 1, 1915, are shown in the following statement: —

Chairman,	.	.	.	.	.	1 at \$3,000.00 yr.
Commissioners,	.	.	.	.	.	2 at 5.00 day ¹
I. Clerk,	.	.	.	.	.	1 at 1,500.00 yr.
Stenographer,	.	.	.	.	.	1 at 85.00 mo.
Stenographer,	.	.	.	.	.	1 at 75.00 mo.
Bookkeeper,	.	.	.	.	.	1 at 62.50 mo.
Stenographer (temporary employee),	.	.	.	.	.	1 at 50.00 mo.
Office boy,	.	.	.	.	.	1 at 25.00 mo.
II. Biologist,	.	.	.	.	.	1 at 1,800.00 yr.
Assistant biologist (temporary employee),	.	.	.	.	.	1 at 55.00 mo.
III. Division for enforcement of law: —						
Chief Deputy,	.	.	.	.	.	1 at 1,500.00 yr.
Deputy commissioners: —						
1. Andover,	.	.	.	.	.	1 at 1,200.00 yr.
Andover (at large),	.	.	.	.	.	1 at 80.00 mo.
2. Ayer (vacant),	.	.	.	.	.
3. Brockton,	.	.	.	.	.	1 at 1,200.00 yr.
4. East Boston,	.	.	.	.	.	1 at 1,200.00 yr.
5. Easthampton,	.	.	.	.	.	1 at 960.00 yr.
6. Edgartown,	.	.	.	.	.	1 at 1,200.00 yr.
7. Fitchburg,	.	.	.	.	.	1 at 1,200.00 yr.
8. Foxborough,	.	.	.	.	.	1 at 1,200.00 yr.
9. Framingham,	.	.	.	.	.	1 at 1,200.00 yr.
10. Gardner,	.	.	.	.	.	1 at 1,200.00 yr.
11. Gloucester,	.	.	.	.	.	1 at 1,200.00 yr.
12. Greenfield,	.	.	.	.	.	1 at 1,200.00 yr.
13. Harwich,	.	.	.	.	.	1 at 1,200.00 yr.
14. Lee,	.	.	.	.	.	1 at 1,200.00 yr.
15. Lynn,	.	.	.	.	.	1 at 1,200.00 yr.
16. Nantucket,	.	.	.	.	.	1 at 1,200.00 yr.
17. New Bedford,	.	.	.	.	.	1 at 1,200.00 yr.

¹ When engaged in the work of the commission.

III. Division for enforcement of Law — *Con.*Deputy Commissioners — *Con.*

18. North Adams,	1 at	\$1,200.00 yr.
19. North Grafton,	1 at	960.00 yr.
20. North Middleborough,	1 at	1,200.00 yr.
21. Palmer,	1 at	1,200.00 yr.
22. Pittsfield,	1 at	1,200.00 yr.
23. Springfield,	1 at	1,200.00 yr.
24. Taunton,	1 at	1,200.00 yr.
25. Ware,	1 at	1,200.00 yr.
26. Westfield,	1 at	1,080.00 yr.
27. Worcester,	1 at	960.00 yr.

IV. Wilbraham Game Farm:—

Superintendent (in charge of propagation of birds),

Assistant,	1 at	100.00 mo. ¹
Laborer,	1 at	55.00 mo. ¹
Laborer,	1 at	2.50 day

V. Sutton Hatchery:—

Superintendent (in charge of propagating fish and birds),

Assistant,	1 at	100.00 mo. ¹
Assistant,	1 at	50.00 mo.
Laborer,	1 at	30.00 mo. ²
Bird culturist (temporary),	1 at	55.00 mo.
Laborers (temporary),	2 at	.20 hr.
Laborer (temporary),	1 at	.15 hr.

VI. Palmer Hatchery:—

Superintendent, 1 at 1,200.00 yr.¹

Foreman (in charge of fish propagation),	1 at	65.00 mo. ¹
Bird and fish culturist,	1 at	60.00 mo. ¹
Teamster,	1 at	50.00 mo. ¹
Laborer (temporary),	1 at	.37½ hr.
Laborer (temporary),	1 at	.56¼ hr.
Laborer (temporary),	1 at	.25 hr.
Assistant (temporary),	1 at	.25 hr.
Laborer,	1 at	.43¾ hr.

VII. Sandwich Hatchery:—

Superintendent (in charge of propagation of fish),

Fish culturist,	1 at	1,200.00 yr. ¹
Fish culturist,	1 at	65.00 mo.
Fish culturists,	2 at	50.00 mo.
Laborer (temporary),	1 at	40.00 mo.
Assistant,	1 at	.20 hr.

¹ With house.² With board.

VIII.	Sandwich Hatchery Bird Farm:—					
	Superintendent,	. . . . .	1 at	\$112.00	mo.	
	Laborer (temporary),	. . . . .	1 at	2.00	day	
IX.	Adams Hatchery:—					
	Superintendent (in charge of hatchery),	. 1 at		15.00	mo. ¹	
X.	Martha's Vineyard Reservation:—					
	Superintendent (in charge of propa-					
	gating birds),	. . . . .	1 at	100.00	mo. ²	
	Laborer (temporary),	. . . . .	1 at	45.00	mo. ³	
	Laborer (temporary),	. . . . .	1 at	35.00	mo.	
XI.	Sharon Reservation:—					
	Superintendent (in charge of propaga-					
	tion of birds),	. . . . .	1 at	70.00	mo.	
XII.	Marshfield Reservation:—					
	Superintendent,	. . . . .	1 at	50.00	mo.	
XIII.	Norfolk State Hospital Reservation:—					
	Superintendent,	. . . . .	1 at	50.00	mo.	
XIV.	Hadley Hatchery (not in use):—					
	Care of hatchery,	. . . . .	1 at	1.00	mo.	

¹ Receives \$15 per month when no fish at hatchery and \$25 per month when taking care of fish.

² With house.

³ With garden.

APPENDIX B.

RECEIPTS OF THE FISH AND GAME COMMISSION DURING THE YEARS 1912, 1913 AND 1914.

[Figures compiled by Fish and Game Commission.]

RECEIVED FROM —	1912.	1913.	1914.
Non-resident licenses (\$10 each),	\$1,018 45	\$1,532 00	\$1,264 70
Non-resident licenses (\$1 each),	84 80	125 65	137 20
Resident licenses (\$1 each),	47,886 40	51,963 45	61,192 25
Alien licenses (\$15 each),	1,507 65	1,820 70	2,372 70
Total,	\$50,497 30	\$55,441 80	\$64,966 85
Sale of lobsters to United States government, .	\$209 85	—	—
Sale of game tags,	—	\$995 95	\$561 70
Interest on bank deposits,	29 35	31 46	41 95
Leases of clam flats,	55 00	—	—
Forfeitures,	2 35	133 10	68 80
Refunds,	3 40	—	—
Sale of launch,	—	200 00	—
Sale of fish (chapter 44, Resolves of 1914), .	—	—	319 12
Yearly totals,	\$50,797 25	\$56,802 31	\$65,958 42

APPENDIX C.

ACQUISITION OF PROPERTIES FOR GAME FARMS AND FISH HATCHERIES.

So far as can be learned from such records as were kept at that time the following purchases of land were made: —

Sutton Hatchery.

Oct. 26, 1891, land and springs (2 acres),	\$387 50
Nov. 19, 1894, land (4 acres),	300 00
Oct. 7, 1902, land (3.75 acres),	225 00
Nov., 1912, land (12.995 acres), (chapter 271, Acts of 1911),	971 62
Total of 22.745 acres, at total cost of,	\$1,884 12

Martha's Vineyard Reservation.

Antone Andrews property: —

Purchased November, 1908.

Cost \$2,500.

Consists of land (600 acres) and building.

Cromwell property: —

Leased June 1, 1912, with option of purchase for \$10,000 in five years.

Consists of land (1,000 acres) and buildings.

Wilbraham Game Farm.

Reader property: —

Leased Jan. 15, 1912.

Purchased June 29, 1914.

Cost \$1,800.

Consists of land (32 acres) and buildings.

Bostick property: —

Leased Nov. 11, 1912.

Purchased June 20, 1913.

Cost \$3,500.

Consists of land (100 acres) and buildings.

Atchinson property: —

Leased Jan. 15, 1912.

No option of purchase.

Consists of 70 acres of land.

Clark property:—

Leased Jan. 15, 1912.
No option of purchase.
Consists of 7 acres of land.

Sandwich Hatchery.

Property of Sandwich Trout Company:—

Taken under chapter 237, Acts of 1912, on July 13, 1912.
Cost \$9,000 (exclusive of amount paid for stock of brood trout, etc.).
Consists of land (26.54 acres) and buildings.

Ray Nye property:—

Leased March 3, 1913.
No option of purchase.
Consists of land (about 15 acres) and buildings.

Lila M. Hitchings property:—

Leased Aug. 29, 1914.
Option of purchase for \$4,200 within two years, or \$4,500 within
a three-year renewal of the lease.
Consists of land (about 50 acres) with buildings.

Palmer Hatchery.

Goodreau property:—

Leased Feb. 10, 1912.
Purchased Aug. 21, 1912.
Cost \$1,900.
Consists of land and buildings (68 acres).

Gates property:—

Leased Feb. 10, 1912.
Purchased March 18, 1913.
Cost \$4,500.
Consists of land (145 acres) and buildings.

Wright property:—

Leased June 29, 1912.
Purchased April 9, 1913.
Cost \$2,000.
Consists of land (20 acres) and buildings.

Henry Fortune:—

Leased July 29, 1914.
Option of purchase within one year for \$1,000.
Consists of about 85 acres of land, with buildings.

APPENDIX D.

DRAFT OF PROPOSED ACT REORGANIZING THE COMMISSION.

AN ACT TO PROVIDE FOR THE APPOINTMENT OF A COMMISSIONER ON FISHERIES AND GAME.

Be it enacted, etc., as follows:

1 SECTION 1. The governor, with the advice and consent of the
2 council, shall appoint a commissioner on fisheries and game who shall
3 hold office for a term of three years from the date of his appointment.
4 Upon the expiration of the term of office of such commissioner the
5 governor shall appoint a successor for a like term. The commissioner
6 shall devote his entire time to the service of the commonwealth, shall
7 receive an annual salary of , and any vacancy for
8 an unexpired term shall be filled by the governor, with the advice and
9 consent of the council. The commissioner may be removed by the gov-
10 ernor, with the advice and consent of the council.

11 Upon the appointment and qualification of the commissioner hereby
12 provided, the present board of commissioners on fisheries and game
13 shall cease to exist, and the commissioner appointed in accordance with
14 the provisions of this section shall succeed to all the powers and assume
15 all the obligations and duties now conferred and imposed by law upon
16 the present board of commissioners on fisheries and game.

1 SECTION 2. The commissioner on fisheries and game is hereby
2 authorized to appoint a first deputy commissioner who shall serve at
3 the pleasure of the commissioner and who shall have immediate direc-
4 tion, under the authority of the commissioner, of the commonwealth's
5 game farms and fish hatcheries. The deputy to be appointed under
6 authority of this section shall have had training and experience in the
7 work of propagation and conservation of game birds and fish. The sal-
8 ary of the first deputy shall be fixed by the commissioner on fisheries
9 and game, subject to the approval of the governor and council.

1 SECTION 3. For the purpose of this act the commissioner may, sub-
2 ject to the rules and regulations of the civil service commission, unless
3 otherwise provided, employ such clerical and other assistance as he
4 may consider necessary.

5 It is further provided that employees now occupying positions
6 which, in the judgment of the commissioner, may be considered un-
7 necessary as the result of reorganization or of the adoption of new
8 methods of work may be removed by the commissioner, any rule and
9 regulation of the civil service commission to the contrary notwith-
10 standing.

1 SECTION 4. Section two of chapter ninety-one of the Revised Laws
2 and all acts and parts of acts inconsistent herewith are hereby repealed.

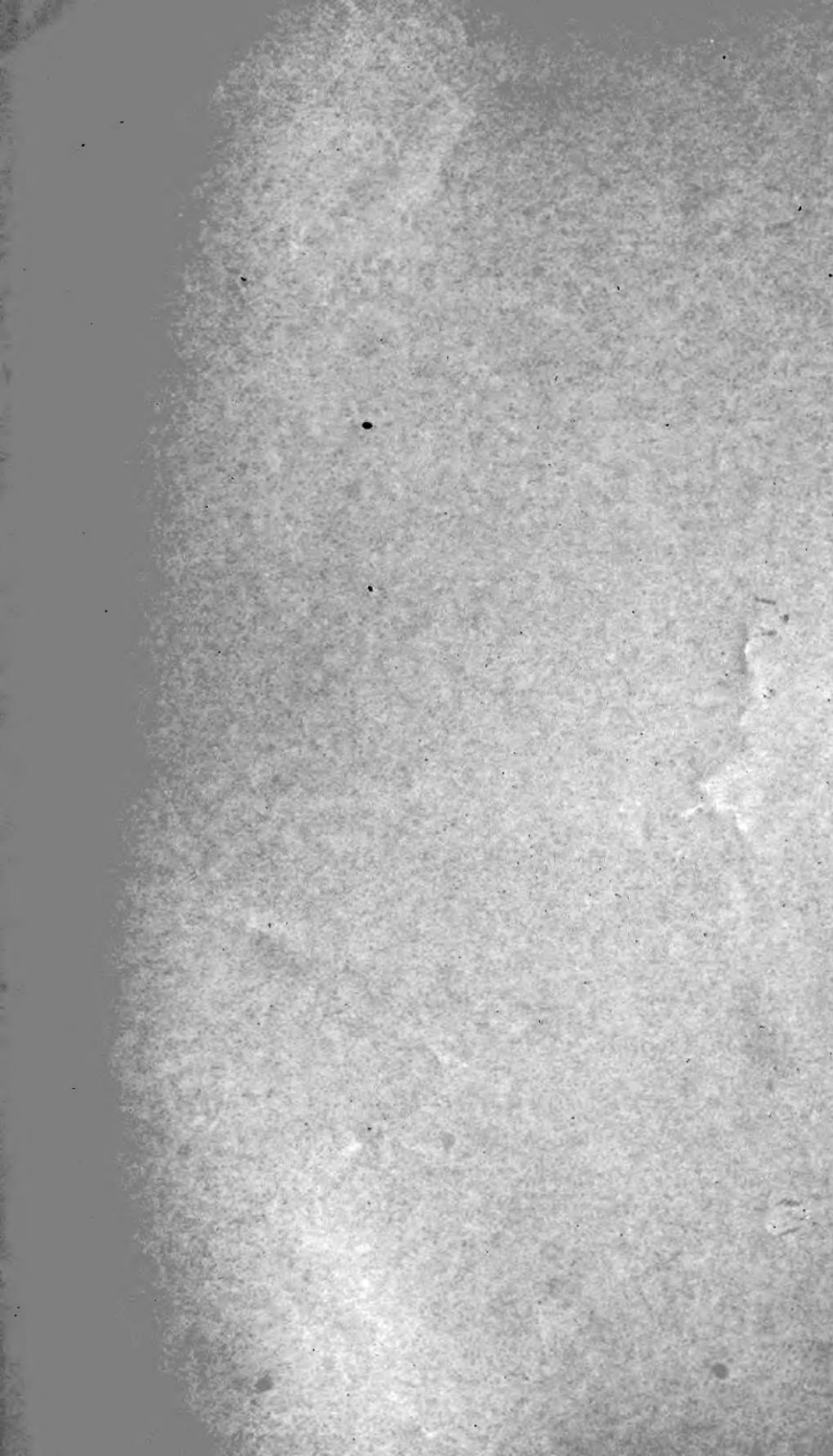
1 SECTION 5. This act shall take effect upon its passage.

APPENDIX E.

DRAFT OF PROPOSED RESOLVE AUTHORIZING SALE OF PROPERTY AT WILBRAHAM.

RESOLVE TO AUTHORIZE THE SALE OF CERTAIN PROPERTY OWNED BY THE COMMONWEALTH IN THE TOWN OF WILBRAHAM.

1 *Resolved*, That the commissioner on fisheries and game is hereby
2 authorized to sell and convey by suitable deed the property owned by
3 the commonwealth in the town of Wilbraham, known as the Wilbra-
4 ham game farm, and acquired under the provisions of chapter two
5 hundred and seventy-one of the acts of the year nineteen hundred and
6 eleven, the proceeds of said sale to be paid into the treasury of the
7 commonwealth.





Makers
Syracuse, N. Y.
PAT. JAN. 21, 1908

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